## ABSTRACT OF THE DISCLOSURE

An internal combustion engine (14) has an associated controller (18) controlling operation of the engine. A fuel pump (10) delivers fuel to the engine at more than one pressure (300 kPa, 800 kPa). The fuel pump includes a fuel inlet (34) and a fuel outlet (68). It also includes a motor (38) and pump assembly (36) for drawing fuel through the inlet into the fuel pump and delivering fuel to the outlet at a pressure higher than the pressure at the inlet. An outlet assembly (40) of the pump includes an outlet pressure sensor (76) and a processor (79) which is responsive to an input from the controller to vary the outlet fuel pressure by controlling the speed of the motor.